

From: [Chiccine, Catherine](#)
To: [Sperry, Clint](#); [Brown, Randolph](#); [Fisher, Susan](#); [Findett - MDNR Feyi ileanmi](#); [Ndubuka, Chinwe](#)
Cc: [Gulley, Katherine](#); [Adkins, Tabatha](#); [Wilder, Valerie](#); [McDonald, Brenna](#); [Hawkins, Terry](#)
Subject: RE: Pre-Call Discussion Regarding Call with City of St. Charles Consultant
Date: Wednesday, March 2, 2022 11:58:00 AM

All,

Clint and I have spent some time reviewing the site documents and here's what we've parsed together regarding the site history of OU4:

- In 2007, EPA issued a CD with the OU3 PRPs that required them to conduct a remedial action at the Findett site and monitor the groundwater surrounding the Site (OU3).
- When the contamination in CW5 was found December 2011, we issued the June 25, 2012 enforcement action memorandum to clean up the contaminated water supply and prevent further contamination.
- In April 2012, the OU3 group investigated the areas around the Ameren Substation and found contamination, so we determined that some of the contamination at CW5 could have come from the Ameren substation. So on December 28, 2012, EPA entered into an AOC with Ameren so that Ameren could conduct an integrated site evaluation to determine to what extent the contamination was coming from the Substation and construct a groundwater containment system to keep the contamination from spreading. At this time we did not know of any separate groundwater plume emanating from the Substation.
- Also, on January 2, 2013, we entered into an AOC with the OU3 PRPs for them to conduct an emergency response action, which included the expected steps of the proposed plan listed in the 2012 emergency action memo (e.g., installation of city wells, etc). So, the OU3 PRPs made a CSM for the installation of extra city wells.
- In 2013, we amended the enforcement action memorandum to determine 4, not 3, wells were needed.
- Meanwhile, from 2014-2016 Ameren conducted a number of pilot studies that included ISCO, bio-augmentation, sodium permanganate, ZVI permeable wall installation, and sodium persulfate injections in the groundwater. These actions improved the water quality so that groundwater emanating from the Substation complied with MCLs.
- In 2015, the final Removal Action Report was issued that confirmed that the contamination at CW5 was not a result of the OU3 groundwater plume, and instead came from a separate plume emanating from the Ameren substation (OU4), and additionally noted the actions taken by Ameren in 2014-2015 to reduce the contamination. Thus no further action by the OU3 PRPs under the 2012 AOC, including installation of extra wells, was necessary, and we issued a notice of completion of work to them in 2015.
- On March 29, 2018 we received Ameren's notice of completion of work under the 2012 AOC and in June 2018, issued a letter providing notice of completion and terminated the 2012 AOC.

So, that's how we got from an action memo setting forth installation of extra wells to no extra wells required. Based on my understanding, Ameren is not required to install more city wells – we can only require PRPs to do work when they are subject to an agreement. In the 2012 AOC the OU3 PRPs

agreed to do the work required by the 2012 action memo. However, in its 2012 AOC Ameren never agreed to such a thing, and in any event, we issued a notice of completion of work to the OU3 PRPs in 2015 and to Ameren in 2018.

Also, below is a timeline of major field activities that were conducted at OU4:

2012	2013	2014	2015	2016
April - surficial and subsurface soil sampling	December - subsurface soil sampling and groundwater profiling.	March - On-Site Pilot Study In-situ remediation technologies - Into clay: Zero Valent Iron EHC® (zero-valent iron with controlled release carbon and nutrients) injections, Potassium Permanganate injections; Into groundwater - Bio-augmentation	April - On-Site Pilot Study soil treatment: Into clay: Sodium Permanganate injections around Transformer #2. Off-Site treatment: Completed the injection of Sodium Persulfate into groundwater near City Well #5	October - On-Site Pilot Study: Into groundwater: Bio Augmentation
June - Subsurface soil sampling and groundwater profiling		March - On -Site Installation of Groundwater Containment System		
July - groundwater profiling, subsurface soil sampling and test pits adjacent to transformers		November - Off-Site Treatment Pilot Study - Installation of two (2) zero-valent iron EHC® permeable barriers downgradient from City Well #5 and south of 370		
August - Subsurface soil sampling, groundwater profiling, MW installations, slug tests and well gauging November - subsurface soil sampling and groundwater profiling		November - Off-Site Treatment Pilot Study - Injection of Sodium Persulfate into groundwater near City Well #5		

Thanks,
Cathie

-----Original Appointment-----

From: Sperry, Clint <Sperry.Clint@epa.gov>

Sent: Tuesday, March 1, 2022 1:01 PM

To: Sperry, Clint; Chiccine, Catherine; Brown, Randolph; Fisher, Susan; Findett - MDNR Feyi ilezanmi; Ndubuka, Chinwe

Cc: Gulley, Katherine; Adkins, Tabatha; Wilder, Valerie; McDonald, Brenna; Hawkins, Terry

Subject: Pre-Call Discussion Regarding Call with City of St. Charles Consultant

When: Tuesday, March 1, 2022 1:00 PM-2:00 PM (UTC-06:00) Central Time (US & Canada).

Where: Microsoft Teams Meeting